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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,834

10/29/2003

Roger R. Newman

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2486

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7590

08/03/2006

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EXAMINER

NORMAN, MARC E

ART UNIT

PAPER NUMBER

3744

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/694,834	Applicant(s) NEWMAN, ROGER R.	
	Examiner Marc E. Norman	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 28-30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-27 is/are allowed.
- 6) ☒ Claim(s) 1,2,7,9,10 and 12-15 is/are rejected.
- 7) ☒ Claim(s) 3-6,8 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/3/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitations "said second tank inlet" and "said second tank outlet" in lines 2 and 3 of the claim. There is insufficient antecedent basis for this limitation in the claim. These features were not recited in base claim 1, from which claim 13 depends. The examiner believes Applicant probably intended claim 13 to depend from claim 3, which does recite these features. However, due to the confusion surrounding this claim, it has not been examined on the merits at this time.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 7, 9, 10, 12, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farris in view of Inoue.

As per claims 1 and 14, Farris teaches a temperate water supply system comprising heat exchanger 78 having inlet 12 connected to a cold water source and outlet 20 connected to a use point (e.g., storage tank 80, hot water tank 56), wherein the water is in contact with ambient air that is warmer than the water so that heat is transferred from the air to the water (column 3, lines 7-17). Farris does not specifically teach the piping structure of the heat exchanger, however multi-conduit heat exchangers are old and well known in the art. Inoue et al., for example, teaches an air-water heat exchanger 14 having multiple parallel conduits (Figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply such a heat exchanger design to heat exchanger 78 of Farris for the simple purpose of achieving efficient heat exchange between the air and the water.

As per claim 2, Farris does not specifically how a drip tray beneath heat exchanger 78, but does discuss one (62) being under heat exchanger 28. It is well known that condensation occurs at air-water heat exchangers, and would have been obvious to one of ordinary skill in the

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art to place a drip tray under heat exchanger 78 similar to that under heat exchanger 28 for the similar purpose of collecting any condensation that occurs.

As per claim 7, Farris does not specifically show a fan blowing air over heat exchanger 78. However, it is obvious and well known to blow air over a heat exchanger in order to improve heat exchange efficiency (such as blower 17 blowing air over heat exchanger 14 in the system of Inoue et al.).

As per claim 9, Farris teaches heat exchange assembly 78 being positioned within the confines of the building (column 3, lines 10-13). As such it would be obvious to locate any fan associated therewith within the living space as well.

As per claim 10, Farris does not specifically teach the system being in the basement, however official notice is taken that this is typically where water-heating systems are disposed.

As per claim 12, Farris teaches the water outlet being fluidly connected to hot water tank 56 (Figure1).

As per claim 15, Farris shows the water pipe within heat exchanger 78 having a generally serpentine path.

Allowable Subject Matter

Claims 3-6, 8, and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 16-27 are allowed.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc E. Norman whose telephone number is 571-272-4812. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MN


MARC NORMAN
PRIMARY EXAMINER